

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-14 are pending in the present application. Claims 13 and 14 are withdrawn. Claim 6 is amended by the present amendment. No new matter is added.

In the outstanding Office Action, Claims 4 and 6 were objected to; Claims 1-7, 11, and 12 were rejected under 35 U.S.C. §103(a) as unpatentable over Suzuki (U.S. Patent No. 6,256,356) in view of Flammer, III et al. (U.S. Patent No. 5,515,369, hereinafter “Flammer”) and further in view of Almgren et al. (“Adaptive Channel Allocation in TACS,” hereinafter “Almgren”); Claim 9 was rejected under 35 U.S.C. §103(a) as unpatentable over Suzuki in view of Flammer and further in view of Jamal et al. (U.S. Patent No. 6,724,813, hereinafter “Jamal”) and Pascual et al. (U.S. Patent No. 6,587,449, hereinafter “Pascual”); and Claim 10 was rejected under 35 U.S.C. §103(a) as unpatentable over Suzuki in view of Flammer and Almgren and further in view of Jamal. However, Claim 8 was objected to as dependent on a rejected base claim, but otherwise was indicated as including allowable subject matter if re-written in independent form.

Applicants gratefully acknowledge the indication that Claim 8 includes allowable subject matter.

Applicants and Applicants’ representatives thank Examiner Daniel for the courtesy of the interview granted to Applicants’ representatives on October 5, 2006. During the interview, differences between the claims and Almgren were discussed, specifically the difference between a time constant of the algorithm and when the algorithm is actually computed. Examiner Daniel agreed to reconsider the rejections of record after formal submission of the present response.

With regard to the objection to Claims 4 and 6, Claim 6 is amended to recite “the performing the allocation allocates the resources available at the base station at a second frequency corresponding to the regular interval.” Thus, it is now explicitly recited in Claim 6 that the regular interval defined in Claim 1 corresponds to the second frequency defined in Claim 6. Accordingly, the objection to Claims 4 and 6 is believed to be overcome.

With regard to the rejection of Claims 1, 11, and 12 under 35 U.S.C. §103(a) as unpatentable over Suzuki in view of Flammer and further in view of Almgren, that rejection is respectfully traversed.

Claim 1 recites in part, “said fast allocation controller generates a pseudo-random sequence and *performs allocation at a regular interval* by selecting at least one available resource for each of a plurality of communications between the base station and the plurality of mobile terminals at a start of each regular interval according to a value of the pseudo-random sequence.”

The outstanding Office Action conceded that Suzuki and Flammer do not describe the feature that the fast allocation controller “performs allocation at a regular interval” and relied on Almgren as describing this feature.<sup>1</sup> However, Almgren only describes that a fast ACA algorithm may use a short time constant and a slow ACA algorithm may use a long time constant, such as a few hours to several days.<sup>2</sup> The outstanding Office Action specifically asserted that the use of different time constants as described by Almgren constituted performing allocation at a “regular interval.”<sup>3</sup> In fact, a time constant is a parameter of a system that signifies the frequency response of the system. The time constant is *irrelevant* to the frequency at which an algorithm is run. For example, the fast ACA algorithm of Almgren with a short time constant could be run at a fast or a slow frequency, as could the slow ACA

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<sup>1</sup>See the outstanding Office Action at page 5, lines 3-18.

<sup>2</sup>See Almgren, page 1518, right column, lines 17-33.

<sup>3</sup>See the outstanding Office Action at page 5, lines 12-18.

algorithm. The fast ACA algorithm could be computed at a much lower frequency than the slow ACA algorithm and it would still be the fast ACA algorithm because it has a shorter time constant. (The frequency response of the fast ACA algorithm is still much quicker than the frequency response of the slow ACA algorithm.) Therefore, there is no teaching or suggestion in Almgren for performing allocation at *any* particular interval, much less a *regular* interval. Accordingly, it is respectfully submitted that none of the cited references teaches or suggests that “said fast allocation controller generates a pseudo-random sequence and *performs allocation at a regular interval* by selecting at least one available resource for each of a plurality of communications between the base station and the plurality of mobile terminals at a start of each regular interval according to a value of the pseudo-random sequence” as recited in independent Claim 1. Consequently, Claim 1 (and Claims 2-10 dependent therefrom) is patentable over Suzuki in view of Flammer and further in view of Almgren.

Claim 11 recites in part “a fast allocation controller associated with the base station and configured to ... *allocate at a start of each first regular interval* the available resources to each communication in the plurality of communications from the base station to the plurality of mobile terminals according to a value of the pseudo-random sequence.” Claim 12 recites “*allocating at a start of each first regular interval* the available resources to the communication according to a value in the pseudo-random sequence.” As noted above, none of the cited references teaches or suggest performing allocation at a *regular interval*. Accordingly, Claims 11 and 12 are also patentable over Suzuki in view of Flammer and further in view of Almgren.

With regard to the rejection of Claim 9 as unpatentable over Suzuki in view of Flammer and Almgren and further in view of Jamal and Pascual, it is noted that Claim 9 is dependent from Claim 1, and thus is believed to be patentable for the reasons discussed

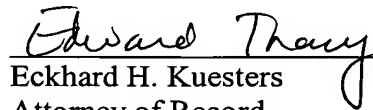
above. Further, it is respectfully submitted that Jamal and Pascual do not cure any of the above-noted deficiencies of Suzuki, Flammer, and Almgren. Accordingly, it is respectfully submitted that Claim 9 is patentable over Suzuki in view of Flammer and Almgren and further in view of Jamal and Pascual.

With regard to the rejection of Claim 10 as unpatentable over Suzuki in view of Flammer and Almgren and further in view of Jamal, it is noted that Claim 10 is dependent from Claim 1, and thus is believed to be patentable for the reasons discussed above. Further, it is respectfully submitted that Jamal does not cure any of the above-noted deficiencies of Suzuki, Flammer, and Almgren. Accordingly, it is respectfully submitted that Claim 10 is patentable over Suzuki in view of Flammer and Almgren and further in view of Jamal.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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